

IN THE CLAIMS:

Please re-write the claims as follows:

- 1 1. (Currently Amended): A method for proxying data access commands from a first
2 storage system to a second storage system in a storage system cluster, the method com-
3 prising the steps of:
4 receiving a data access command at the first storage system that is directed to the
5 second storage system;
6 forwarding the received data access command to the second storage system via a
7 cluster interconnect;
8 processing the data access command at the second storage system;
9 returning a response from the second storage system to the first storage system via
10 the cluster interconnect; and
11 sending a response to the data access command to ~~the~~ a client from the first stor-
12 age system.
- 1 2. (Original): The method of claim 1 wherein the storage systems are storage appliances
2 and wherein the data access command is received at a proxy port associated with the first
3 storage appliance.
- 1 3. (Original): The method of claim 2 wherein the proxy port comprises a physical port.
- 1 4. (Original): The method of claim 2 wherein the proxy port comprises a virtual port as-
2 sociated with a physical port.
- 1 5. (Original): The method of claim 1 wherein the response comprises requested read
2 data.

- 1 6. (Original): The method of claim 1 wherein the response comprises an acknowledge-
2 ment of a write operation.
- 1 7. (Original): The method of claim 1 wherein the response comprises a predetermined
2 set of read data.
- 1 8. (Original): The method of claim 1 wherein the cluster interconnect comprises a direct
2 link between the first storage system and the second storage system.
- 1 9. (Currently Amended): A system adapted to proxy data access commands from a first
2 storage system to a second storage system connected via a cluster interconnect, the sys-
3 tem comprising:
4 a virtual target ~~layer~~ module interfacing with a virtual adapter on the first storage
5 system, the virtual target module adapted to make a forwarding decision of a received
6 data access request to thereby forward the request to the second storage system.
- 1 10. (Original): The system of claim 9 wherein the forwarding decision is based on a port
2 to which the data access request is directed.
- 1 11. (Original): The system of claim 10 wherein the forwarding decision is based upon a
2 logical unit address contained within the data access request.
- 1 12. (Original): A storage appliance for use in a storage appliance cluster for proxying
2 data access commands received at the storage appliance to a second storage appliance in
3 a storage appliance cluster, the storage appliance comprising:
4 a storage operating system executing on the storage appliance, the storage operat-
5 ing system including a virtual target module adapted to forward received data access
6 commands to the second storage appliance in the storage appliance cluster.

1 13. (Original): The storage appliance of claim 12 wherein the storage operating system
2 further comprising a virtual adapter that interfaces with the virtual target module and an
3 interconnect driver for forwarding the received data access commands from the virtual
4 target module to the second storage appliance via a cluster interconnect managed by the
5 interconnect driver.

1 14. (Original): The storage appliance of claim 13 wherein the cluster interconnect com-
2 prises a fibre channel interconnect.

1 15. (Original): The storage appliance of claim 13 wherein the cluster interconnect di-
2 rectly connects the storage appliance to the second storage appliance.

1 16. (Original): The storage appliance of claim 12 wherein the virtual adapter interfaces
2 with a virtual interface emulation layer to provide remote direct memory access capabili-
3 ties for transferring or forwarding received data access commands to the second storage
4 appliance.

1 17. (Currently Amended): A method for proxying data access commands in ~~the~~ a first
2 storage system to a second system in a storage system cluster, the method comprising the
3 steps of:

4 analyzing a received data access command at the first storage system;;
5 forwarding the received data access command to the second storage system; and
6 processing the received data access command at the second storage system.

1 18. (Original): The method of claim 17 further comprising the steps of;
2 returning a response from the second storage system to the first storage system;
3 and

4 sending a response to the data access command to the client from the first storage
5 system.

1 19. (Original): The method of claim 17 wherein the step of forwarding further comprises
2 the step of forwarding the data access command to the second storage system via a cluster
3 interconnect.

1 20. (Original): The method of claim 19 wherein the cluster interconnect comprises a fibre
2 channel link.

1 21. (Original): The method of claim 19 wherein the cluster interconnect comprises a direct
2 link between the first storage system and the second storage system.

1 22. (Original): The method of claim 17 further comprising the step of receiving the data
2 access command is at a proxy port of the first storage system.

1 23. (Original): The method of claim 22 wherein the proxy port comprises a physical
2 port.

1 24. (Original): The method of claim 22 wherein the proxy port comprises a virtual port
2 associated with the physical port.

1 25. (Original): The method of claim 18 wherein the response comprises requested read
2 data.

1 26. (Original): The method of claim 18 wherein the response comprises an acknowledgement
2 of the write operation.

1 27. (Currently Amended): A computer readable medium, including program instructions
2 executing on a computer, for proxying data access commands from a first storage system
3 to a second storage system in a storage system cluster, the computer readable medium
4 including instructions for performing the steps of:
5 receiving a data access command at the first storage system that is directed to the
6 second storage system;
7 forwarding the received data access command to the second storage system via a
8 cluster interconnect;
9 processing the data access command at the second storage system;
10 returning a response from the second storage system to the first storage system via
11 the cluster interconnect; and
12 sending a response to the data access command to ~~the~~ a client from the first stor-
13 age system.

1 28. (Currently Amended): A system for proxying data access commands from a first
2 storage system to a second storage system connected via a cluster interconnect, the sys-
3 tem comprising:
4 means for receiving a data access command at the first storage system that is di-
5 rected to the second storage system;
6 means for forwarding the received data access command to the second storage
7 system via a cluster interconnect;
8 means for processing the data access command at the second storage system;
9 means for returning a response from the second storage system to the first storage
10 system via the cluster interconnect; and
11 means for sending a response to the data access command to ~~the~~ a client from the
12 first storage system.

1 29. (Original): The method of claim 28 wherein storage systems are storage appliances
2 and the data access command is received at a proxy port associated with the first storage
3 appliance.

1 30. (Original): The method of claim 29 wherein the proxy port comprises a physical
2 port.

1 31. (Original): The method of claim 29 wherein the proxy port comprises a virtual port
2 associated with a physical port.

1 32. (Original): The method of claim 28 wherein the response comprises requested read
2 data.

1 33. (Original): The method of claim 28 wherein the response comprises an acknowl-
2 edgement of a write operation.

1 34. (Original): The method of claim 28 wherein the response comprises a predetermined
2 set of read data.

Please add new claims 35 et seq. as follows:

- 1 35. (New): A method for proxying data access commands from a first storage system to
2 a second storage system in a storage system cluster, the method comprising:
3 receiving a data access command at the first storage system that is directed to the
4 second storage system;
5 forwarding a data access command from the first storage system to the second
6 storage system;
7 processing the data access command at the second storage system; and
8 returning a response from the second storage system to the first storage system.
- 9 36. (New): The method of claim 35 further comprises sending a response to the data ac-
10 cess command from the first storage system.
- 1 37. (New): The method of claim 35 wherein the data access command is forwarded via a
2 cluster interconnect.
- 1 38. (New): The method of claim 35 further comprises receiving by the first storage sys-
2 tem the data access command that is directed to the second storage system.
- 1 39. (New): The method of claim 35 further comprises returning the response from the
2 first storage system to a client.
- 1 40. (New): The method of claim 39 wherein the response is returned via the cluster in-
2 terconnect.